Listing of Claims

1. ~ 30. (Canceled)

31. (Currently Amended) A liquid crystal display device, comprising:

a non-rubbed SiC_x alignment layer comprising constituent silicon and carbon materials; and

liquid crystal material disposed in contact with the non-rubbed SiC_x alignment layer,

wherein the constituent materials of the non-rubbed SiC_x alignment layer have a predetermined stoichiometric relationship that imparts a predetermined pretilt angle to the liquid crystal material based on an amount, x, of the constituent carbon material,

wherein the non-rubbed SiC_x alignment layer imparts a pretilt angle in a range of about 4 to about 5 degrees when x is set to about 2.

32. (Canceled)

33. (Currently Amended) ~~The liquid crystal display device of claim 31~~ A liquid crystal display device, comprising:

a non-rubbed SiC_x alignment layer comprising constituent silicon and carbon materials; and

liquid crystal material disposed in contact with the non-rubbed SiC_x alignment layer,

wherein the constituent materials of the non-rubbed SiC_x alignment layer have a predetermined stoichiometric relationship that imparts a predetermined pretilt angle to the liquid crystal material based on an amount, x, of the constituent carbon material,

wherein the non-rubbed SiC_x alignment layer imparts a pretilt angle in a range of about 0.5 to about 1 degree when x is set to about 1.5.

34. (Currently Amended) A liquid crystal display device, comprising:

a non-rubbed SiO_yN_z alignment layer comprising constituent silicon , oxygen and nitrogen materials; and

liquid crystal material disposed in contact with the non-rubbed SiO_yN_z alignment layer,

wherein the constituent materials of the non-rubbed SiO_yN_z alignment layer have a predetermined stoichiometric relationship that imparts a predetermined pretilt angle to the liquid crystal material based on amounts, y and z, of the respective constituent oxygen and nitrogen materials,

wherein the non-rubbed SiO_yN_z alignment layer imparts a pretilt angle in a range of about 0 to about 1 degree by adjusting y and z.

35. (Canceled)